

School District No. 63

**Great Places to Learn
& Safe Places to Be**

Saanich Schools

2014 Carbon Neutral Action Report

Executive Summary

The Board of Education for School District No. 63 (Saanich) is committed to an environmental learning and sustainability policy that is intended to support the education of ecologically literate individuals with the knowledge, skills, attitudes, experiences and motivation to take personal responsibility and leadership for innovative local and global solutions. This policy also targets energy reductions of 50% and Greenhouse Gas (GHG) reductions of 33% from 2007 levels of consumption by 2020.

School District 63 has been contributing toward carbon neutrality for a number of years by actively pursuing energy conservation in existing buildings and designing new buildings to a high standard of environmental design. The District is committed to creating a sustainable future for students through education and operations and has achieved a reduction in GHG emissions of 15% in 2014, compared to the previous year.



2014 Greenhouse Gas Emissions

GHG emissions from all sources covered by the Greenhouse Gas Reduction Targets Act were 1716 tonnes in 2014. Fugitive emissions from stationary cooling comprises less than 1% of total emissions and are deemed out-of-scope and are not included in the total GHG emissions profile or offset purchase. GHG emissions have been reduced by 15% in 2014 compared to the previous year due to mild winter weather and the implementation of several energy conservation projects.

Offsets Applied to Become Carbon Neutral in 2014

The School District has purchased 1384 tonnes of offsets for \$36,330 to achieve carbon neutrality in 2014, which includes 1379 tonnes of offsets for 2014 and 5 tonnes of offsets for emissions adjusted from previous year's data. A total of 337 tonnes of emissions resulting from the operation of school buses were reported as part of our GHG emissions profile in 2014 but are not required to be offset as they are out-of-scope under Carbon Neutral Government Regulations.

Overviews

Actions Taken to Reduce Greenhouse Gas Emissions in 2014

School District 63 is a participant in the Power Smart Partnership with BC Hydro to promote energy conservation and reduce energy consumption. Our Energy Manager provides leadership to the District in encouraging an energy conservation culture amongst staff and students. Energy conservation initiatives completed in 2014 include lighting retrofits, adjusting controls to reduce energy consumption overnight and the first successful test installations of LED lighting. Operational efficiency of existing systems was a priority, using the Continuous Optimization program offered by BC Hydro to ensure building energy consumption is minimized during periods of low occupancy. A restriction on purchases of non-recycled paper products also contributed to a reduction in GHG emissions in the District.

Plans to Continue Reducing Greenhouse Gas Emissions 2015 – 2016

The School District will continue to identify and implement cost-effective energy conservation projects to further reduce energy consumption and GHG emissions. LED lighting technology has advanced and costs have fallen to the point where some applications are cost-effective and several LED lighting projects will be implemented in 2015. Upgraded control systems in smaller buildings will lower energy consumption during low occupancy and unoccupied periods. Extensive energy audits have identified specific operational and behavioural habits of staff and students, that, if changed, could reduce energy consumption. A behavioural campaign will evolve from general awareness of energy conservation to targeting particular groups with specific actions that could reduce energy consumption, with feedback of results.

Declaration Statement:

This is the 2014 Carbon Neutral Action Report for School District No. 63 (Saanich). This report contains our 2014 emissions profile, offsets purchased, the actions we have taken in 2014 to reduce our GHG emissions and our plans to continue reducing emissions in 2015 and beyond.

School District No. 63 will post the final report to our website at www.sd63.bc.ca by June 30, 2015.

Emissions and Offsets Summary:**School District No. 63 GHG Emissions and Offsets for 2014**

Total GHG emissions in 2014	1716 tonnes
Total GHG emissions for Offsets from 2014 reporting year	1379 tonnes
Adjustments to previous year's data	5 tonnes
Total Offsets purchased in 2014	1384 tonnes



Mark Fraser
Assistant Superintendent

Date

2014 Carbon Neutral Action Report (CNAR)

- Part 2 ACTIONS

Organization Name

School District 63 (Saanich)

Actions Taken to Reduce Emissions

1) Stationary Fuel Combustion, Electricity (Buildings): Indicate which actions were taken in 2014:

Performed energy retrofits on existing buildings

Yes

Built or are building new LEED Gold or other "Green" buildings.

Yes

Undertook an evaluation of overall building energy use.

Yes

Please list any other actions taken to reduce emissions from Buildings:

Performed extensive energy audits to identify future energy conservation initiatives, including retrofit projects and behavioural and operational measures, to identify specific staff behaviours that could be changed to reduce energy consumption, how much energy could be saved and which staff members to target for behavioural change.

2) Mobile Fleet Combustion (Fleet and other vehicles): Indicate which actions were taken in 2014:

Do you have a fleet?

Yes

Replaced existing vehicles with more fuel efficient vehicles (gas/diesel)

Yes

Replaced existing vehicles with hybrid or electric vehicles

No

Reduced the overall number of fleet vehicles

No

Took steps to drive less than last year

No

Please list any other actions taken to reduce emission from fleet:

(No response)

3) Supplies (Paper):Indicate which actions were taken in 2014:

Used less paper than previous year

Yes

Used only 100% recycled paper

No

Used some recycled paper

Yes

Used alternate source paper (Bamboo, hemp, etc.)

No

Please list any other actions taken to reduce emissions from paper use:

Implemented purchasing policy that blocks purchases of paper with 0% recycled content from supplier. Staff or departments must receive permission before supplier will fill an order for 0% recycled paper. This measure reduces both GHG emissions and cost.

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Actions Taken to Reduce Emissions - continued

Explain how you plan to continue minimizing emissions in 2015 and future years:

LED lighting retrofits will occur in 2015, as well as installation of controls to allow portables and smaller buildings to have temperatures reduced during unoccupied periods (nights, weekends, holidays). Development of shutdown procedures for extended breaks, such as the Spring Break and Xmas break will be undertaken to ensure energy consumption is minimized during these periods. Also, some sites which have specialized lighting will have these lights connected to DDC rather than be available on a switch so the lights will be available only by schedule, and not switched on by users. Areas which have been identified to have excess light levels will be retrofitted with lower wattage lamps.

If you wish to list any other "sustainability actions" outside of buildings, fleet, paper and travel check "yes". This reporting is optional.

Yes

Actions to Promote Sustainability and Conservation - OptionalThe following are actions that fall outside the scope of the Carbon Neutral Government Regulation, but which many organizations still undertake and may wish to report on. This section is optional for reporting.

Business TravelCreated a low-carbon travel policy or travel reduction goal (Low-carbon: Lowest emission of greenhouse gases per kilometre per passenger)

No

Virtual Meeting TechnologyInstalled web-conferencing software (e.g., Live Meeting, Elluminate, etc.)

Yes

Made desktop web-cameras available to staff

Yes

Encourage alternative travel to meetings (e.g., bicycles, public transit, walking)

No

Encourage carpooling to meetings

Yes

Education and AwarenessHave created Green, Sustainability, Energy Conservation, or Climate Action Teams.

Yes

Provided resources and/or dedicated staff to support these teams

Yes

Provided behaviour change education/training for these teams (e.g., community-based social marketing)

Yes

Established a sustainability/green awards or recognition program

No

Support green professional development (e.g., workshops, conferences, training)

No

Planning for Climate Change Have assessed whether extreme weather events and/or long term changes in climate will affect our organization's business areas

No

Long term changes in climate have been incorporated into our organization's decision making.

No

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Actions to Promote Sustainability and Conservation - Optional (continued)

Staff Awareness and Education Provided education to staff about the science of climate change

No

Provided education to staff about the conservation of water, energy, and raw materials

No

Provided green tips on staff website or in newsletters

Yes

Alternate Work/Commuting Options Allow for telework/working from home

No

Staff have the option of a compressed work week

No

Commuting by foot, bicycle, carpool or public transit is encouraged

Yes

Shower or locker facilities are provided for staff/students who commute by foot or by bicycle

Yes

Secure bicycle storage is provided

Yes

Other Sustainability Actions Establish a water conservation strategy which includes a plan or policy for replacing water fixtures with efficient models

No

Put in place a potable water management strategy to reduce potable water demand of building-level uses such as cooling tower equipment, toilet fixtures, etc. and landscape features

No

Have put in place an operations policy to facilitate the reduction and diversion of building occupant waste from landfills or incineration facilities

Yes

**Have implemented a hazardous waste reduction and disposal strategy
(Hazardous Waste: E.g., electronics including computer parts and monitors,
batteries, paints, fluorescent bulbs)**

Yes

**Have incorporated minimum recycled content standards into procurement
policy for consumable, non-paper supplies (e.g., writing instruments, binders,
toner cartridges, etc.)**

No

**Established green standards for goods that are replaced infrequently and/or
may require capital funds to purchase (e.g., office furniture, carpeting, etc.)**

No

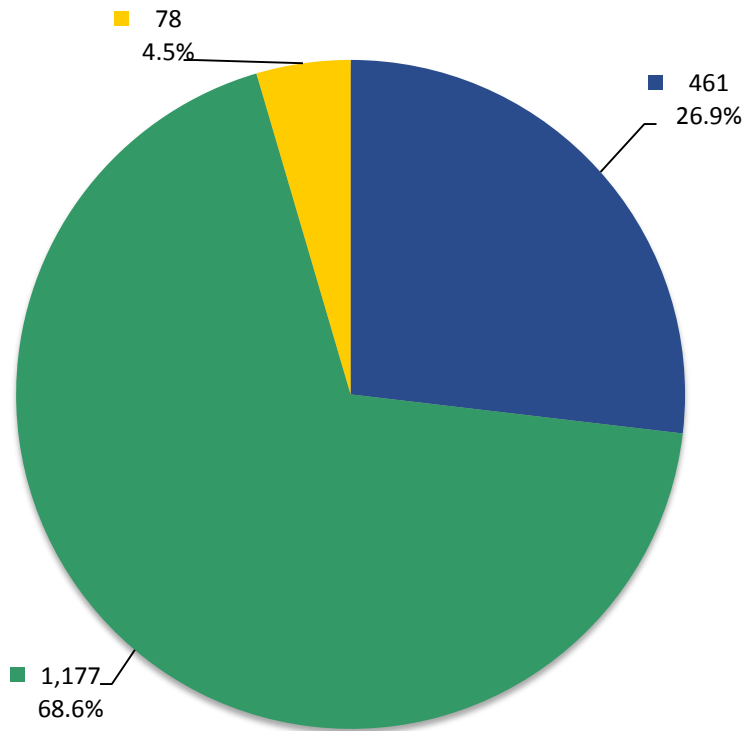
Incorporated lifecycle costing into new construction or renovations

No

**Please list and other sustainability actions you wish to report not included in the
previous list.**

(No response)

**School District 63 - Saanich
Greenhouse Gas Emissions by Source
for the 2014 Calendar Year (tCO₂e*)**



Total Emissions: 1,716

- Mobile Fuel Combustion (Fleet and other mobile equipment)
- Stationary Fuel Combustion (Building Heating and Generators) and Electricity
- Supplies (Paper)

Offsets Applied to Become Carbon Neutral in 2014 (Generated June 23, 2015 3:12 PM)

Total offsets required: **1,379**. Total offset investment: **\$34,475**. Emissions which do not require offsets: **337** **

*Tonnes of carbon dioxide equivalent (tCO₂e) is a standard unit of measure in which all types of greenhouse gases are expressed based on their global warming potential relative to carbon dioxide.

** Under the *Carbon Neutral Government Regulation of the Greenhouse Gas Reduction Targets Act*, all emissions from the sources listed above must be reported. As outlined in the regulation, some emissions do not require offsets.